

# MDS Energy Development, LLC

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October 7, 2019

Air & Radiation Division

Mr. Mark Gorog Regional Air Quality Program Manager Pennsylvania Department of Environmental Protection Southwest Regional Office 400 Waterfront Drive Pittsburgh, PA 15222-4745

#### VIA CERTIFIED MAIL, RETURN RECEIPT

Re: Submittal of 40 CFR §60.5415a and 40 CFR §60.5420a Annual Report for Gas Well Affected

Facilities Subject to 40 CFR Part 60, Subpart OOOOa For the Period of August 3, 2018 through August 2, 2019 MDS Energy Development, LLC – Biblical Life Well Pad

Dear Mr. Gorog:

MDS Energy Development, LLC (MDS) is submitting the enclosed annual report for gas well affected facilities located at the Biblical Life well pad subject to the requirements of 40 CFR Part 60, Subpart OOOOa – Standards of Performance for Crude Oil and Natural Gas Facilities for which Construction, Modification or Reconstruction Commenced After September 18, 2015 (Subpart OOOOa). MDS is submitting this report for the compliance period of August 3, 2018 through August 2, 2019 in accordance with the requirements of 40 CFR §60.5415a and 40 CFR §60.5420a(b). Pursuant to 40 CFR §60.5420a(b), annual reports are due no later than the same date each year as the initial annual report. The initial annual report for the Biblical Life well pad was submitted on October 11, 2017. Therefore, subsequent annual reports are due no later than October 11<sup>th</sup> of each year.

If you have any questions or require additional information, please contact me at (724) 548-2501 or at randy.morris@mdsenergydev.com.

Sincerely,

MDS Energy Development, LLC

Randall L Morris Jr. Chief Operating Officer

Enclosures

Ce: Ms. Cristina Fernandez – U.S. EPA, Region III | Director, Air Protection Division

#### MDS ENERGY DEVELOPMENT, LLC (MDS)

# 40 CFR PART 60, SUBPART OOOOa – STANDARDS OF PERFORMANCE FOR CRUDE OIL AND NATURAL GAS FACILITIES FOR WHICH CONSTRUCTION, MODIFICATION OR RECONSTRUCTION COMMENCED AFTER SEPTEMBER 18, 2015

#### ANNUAL REPORT

#### BIBLICAL LIFE WELL PAD

40 CFR Part 60, Subpart OOOOa (Subpart OOOOa) continuous compliance demonstration requirements and ongoing reporting requirements are codified at 40 CFR §60.5415a and 40 CFR §60.5420a, respectively. Applicability determinations for these requirements to MDS natural gas production well sites and associated compliance demonstrations are provided hereafter.

#### I. Reporting in accordance with 40 CFR §60.5415a(a), as detailed in 40 CFR §60.5420a(b)

40 CFR §60.5420a(b) requires owner/operators to submit annual reports providing information specified at 40 CFR §§60.5420a(b)(1) through (8) and (12). One report may be submitted for multiple affected facilities.

In accordance with 40 CFR §60.5420a(b)(11), Subpart OOOOa reports must be submitted via the U.S. Environmental Protection Agency (U.S. EPA) Compliance and Emissions Data Reporting Interface (CEDRI), unless the reporting form specific to Subpart OOOOa is not available in CEDRI at the time that the report is due. While a draft version of the Subpart OOO0a Annual Report template is available on the U.S. EPA Oil and Natural Gas Industry webpage, the final reporting form template was not available in CEDRI at the time that this report was submitted. MDS understands that facilities are not required to electronically submit the annual report until 90 days after the final template has been made available in CEDRI. Therefore, this report is being submitted in hard-copy to the appropriate delegated authority address.

#### General Information [40 CFR §60.5420a(b)(1)]

(i) The company name, facility site name associated with the affected facility, US Well ID or US Well ID associated with the affected facility, if applicable, and address of the affected facility or description of the site location/latitude and longitude coordinates of the site:

Company Name and Address: MDS Energy Development, LLC 409 Butler Road, Suite A Kittanning, PA 16201-4403 Phone (724) 548-2501 Table 1

Table 1 Summary of Affected Gas Well Facilities per 40 CFR §60.5420a(b)

Well Name	County	Township	Latitude	Longitude	API Number
Biblical Life 1H-A	Armstrong	South Buffalo	40.74379	-79.64668	37-005-31254-00-00
Biblical Life 2H	Armstrong	South Buffalo	40.74384	-79.64663	37-005-31255-00-00
Biblical Life 3H	Armstrong	South Buffalo	40.74388	-79.64659	37-005-31256-00-00
Biblical Life 4H	Armstrong	South Buffalo	40.74392	-79.64654	37-005-31257-00-00

# (ii) Identification of each affected facility being included in the annual report:

Identification of each affected gas well facility is provided in Table 1. Other affected facilities include fugitive emissions components associated with each affected gas well facility.

# (iii) Beginning and ending dates of the reporting period:

MDS is submitting this report for the period from August 3, 2018 through August 2, 2019.

# (iv) Certification by responsible official of truth, accuracy, and completeness:

I certify that I am a certifying official as that term is defined in 40 CFR §60.5430a. I further certify, based on information and belief formed after reasonable inquiry, the statements and information in this document are true, accurate, and complete.

Responsible Official:	Randall L. Morris Jr.	
Title:	Chief Operating Officer	
Signature:	Val.	
Date:	October 07, 2019	

#### Records for Well Affected Facilities [40 CFR §60.5420a(b)(2)]

- (i) Records for each well completion operation:
  - N/A There were no well completions conducted during the reporting period.
- (ii) Records of deviations:
  - N/A There were no well completions conducted during the reporting period.
- (iii) Records specified in 40 CFR §60.5420a(c)(1)(vii), if applicable, that support a determination under 40 CFR §60.5432a that the well affected facility is a low pressure well as defined in 40 CFR §60.5430a:

The MDS affected gas well facilities, summarized in Table 1, do not meet the definition of a low pressure well, as defined in 40 CFR §60.5430a.

#### Records for Fugitive Emissions Components Affected Facilities [40 CFR §60.5420a(b)(7)]

(i) Records for each monitoring survey conducted for the collection of fugitive emissions components at each well site:

Attachment A provides the required records for each monitoring survey conducted for the collection of fugitive emissions components at each well site, as specified in 40 CFR §§60.5420a(b)(7)(i)–(xii).

Subpart OOOOa Requirements Not Applicable to MDS [40 CFR §§60.5420a(b)(2), (3), (4), (5), (6), (8), (9), (10), and (12), 60.5422a and 60.5423a]

MDS has determined that the requirements specified at 40 CFR §§60.5420a(b)(2), (3), (4), (5), (6), (8), (9), (10), and (12), 60.5422a and 60.5423a are not applicable to MDS natural gas production well sites. Details of these non-applicability determinations are provided hereafter.

# STATEMENTS OF NON-APPLICABILITY OF OTHER POTENTIALLY AFFECTED SUBPART OOOOa FACILITIES

#### Compressors

40 CFR §60.5420a(b)(3) and (4) specify reporting requirements for affected centrifugal and reciprocating compressors, respectively.

#### I. Regulatory Background

Pursuant to 40 CFR §60.5365a(b) and (c), a centrifugal compressor affected facility and reciprocating compressor affected facility, for which construction, modification, or reconstruction commenced after September 18, 2015, are defined as follows:

- Each centrifugal compressor affected facility, which is a single centrifugal compressor using wet seals. A centrifugal compressor located at a well site, or an adjacent well site and servicing more than one well site, is not an affected facility under this subpart.
- Each reciprocating compressor affected facility, which is a single reciprocating compressor. A reciprocating compressor located at a well site, or an adjacent well site and servicing more than one well site, is not an affected facility under this subpart.

#### II. Compliance Approach

MDS does not own or operate centrifugal compressors or reciprocating compressors at its natural gas production well sites. Thus, the centrifugal and reciprocating compressor requirements of Subpart OOOOa do not apply to the Biblical Life well pad.

#### Pneumatic Controllers

40 CFR §60.5420a(b)(5) specifies reporting requirements for affected pneumatic controller facilities.

#### I. Regulatory Background

Pursuant to 40 CFR §60.5365a(d)(1), a pneumatic controller affected facility, which is not located at a natural gas processing plant, is a single continuous bleed natural gas-driven pneumatic controller operating at a natural gas bleed rate greater than 6 standard cubic feet per hour (scfh) for which construction, modification or reconstruction commenced after September 18, 2015. In accordance with 40 CFR §60.5430a, MDS owns and operates gas well production facilities that meet the definition of a well site.

#### II. Compliance Approach

MDS owns and operates natural gas-driven pneumatic controllers at its natural gas production well sites. However, MDS pneumatic controllers do not meet the affected facility criteria specified at 40 CFR §60.5365a(d)(2). The design specifications for MDS pneumatic controllers specify that they do not continuously bleed. Based upon the information presented above, MDS understands that they do not currently own or operate any affected pneumatic controllers at their natural gas production well sites. Therefore, the pneumatic controller requirements of Subpart OOOOa do not currently apply to MDS natural gas production facilities. Manufacturer documentation for the

pneumatic controllers used by MDS is maintained on file and is available for inspection upon request.

#### Storage Vessels

40 CFR §60.5420a(b)(6) specifies reporting requirements for affected storage vessel facilities.

# I. Regulatory Background

Pursuant to 40 CFR §60.5365a(e), a storage vessel affected facility is a single storage vessel with the potential for volatile organic compound (VOC) emissions equal to or greater than six tons per year (tpy) for which construction, modification or reconstruction commenced after September 18, 2015. In accordance with 40 CFR §60.5430a, a storage vessel is defined as follows:

 Storage vessel means a tank or other vessel that contains an accumulation of crude oil, condensate, intermediate hydrocarbon liquids, or produced water, and that is constructed primarily of nonearthen materials (such as wood, concrete, steel, fiberglass, or plastic) which provide structural support.

MDS owns and operates storage vessels, as defined above, at its natural gas production well sites. In accordance with 40 CFR §60.5365a(e), MDS understands that the potential for VOC emissions from the storage vessels must be calculated using a generally accepted model or calculation methodology, based on the maximum average daily throughput determined for a 30-day period of production prior to the applicable emissions determination deadline specified. MDS also understands the applicable emissions determination deadline for storage vessels constructed during this reporting period is 30 days after startup.

#### II. Compliance Approach

MDS has determined the potential VOC emissions from each potentially affected Subpart OOOOa storage vessel to be less than six tpy. Therefore, pursuant to 40 CFR §60.5365a(e), MDS does not currently own or operate any affected storage vessels at the Biblical Life well pad.

As part of the Biblical Life Well Pad Compliance Demonstration under Pennsylvania Air Quality Permit Exemptions (i.e., Document No. 275-2101-003, Exemption No. 38a, 38b, or 38c), as applicable, MDS previously submitted VOC emissions estimates which include the calculation methodology and demonstrate Subpart OOOOa non-applicability to PADEP. Documentation of the Biblical Life well pad storage vessel applicability determination is also maintained by MDS and is available for inspection upon request.

#### Pneumatic Pumps

40 CFR §60.5420a(b)(8) specifies reporting requirements for affected pneumatic pump facilities.

#### I. Regulatory Background

MDS operations are defined by Subpart OOOOa as well sites. Pursuant to 40 CFR §60.5365a(h)(2), a pneumatic pump affected facility located at a well site is a single natural gasdriven diaphragm pump for which construction, modification or reconstruction commenced after September 18, 2015.

A natural gas-driven diaphragm pump, as defined in 40 CFR §63.5430a, is a positive displacement pump powered by pressurized natural gas that uses the reciprocating action of flexible diaphragms in conjunction with check valves to pump a fluid. A pump in which a fluid is displaced by a piston driven by a diaphragm is not considered a diaphragm pump for purposes of this subpart.

# II. Compliance Approach

MDS does not own or operate any pneumatic pumps. Thus, the pneumatic pump requirements of Subpart OOOOa do not apply to MDS natural gas production facilities.

#### Closed Vent Systems

40 CFR §60.5420a(b)(12) specifies reporting requirements for closed vent systems.

# I. Regulatory Background

40 CFR §60.5411a(d) specifies closed vent systems requirements for centrifugal compressor wet seal fluid degassing systems, reciprocating compressors, pneumatic pumps and storage vessels using a control device or routing emissions to a process. Owners/operators must conduct an assessment to document that the closed vent system is of sufficient design and capacity to ensure that all emissions from the affected facility are routed to the control device and that the control device is of sufficient design and capacity to accommodate all emissions from the affected facility. The assessment must be certified by a qualified professional engineer.

# II. Compliance Approach

MDS does not own or operate any of the affected facilities for which closed vent systems requirements are specified in Subpart OOOOa. MDS does not use a control device or route emissions to a process for any of its affected facilities. Therefore, the closed vent systems requirements of Subpart OOOOa do not apply to MDS natural gas production facilities.

Because MDS does not use a control device to comply with the applicable requirements of Subpart OOOOa, the requirement to conduct a performance test in accordance with 40 CFR §60.8 does not apply. Therefore, the performance test reporting requirements codified at 40 CFR §§60.5420a(b)(9) and (10) do not apply to MDS natural gas production facilities.

#### Process and Sweetening Units

40 CFR §§60.5422a and 60.5423a specify reporting requirements for process and sweetening units.

# I. Regulatory Background

Pursuant to 40 CFR §60.5365a(f) and (g), and as defined further in 40 CFR §60.5430a, a process unit affected facility and sweetening unit affected facility (for which construction, modification or reconstruction commenced after September 18, 2015), are as follows:

The group of all equipment within a process unit.

- O Process unit means components assembled for the extraction of natural gas liquids from field gas, the fractionation of the liquids into natural gas products, or other operations associated with the processing of natural gas products. A process unit can operate independently if supplied with sufficient feed or raw materials and sufficient storage facilities for the products.
- Sweetening units located at onshore natural gas processing plants that process natural gas produced from either onshore or offshore wells.
  - Sweetening unit means a process device that removes hydrogen sulfide and/or carbon dioxide from the sour natural gas stream.

# II. Compliance Approach

MDS operations do not include natural gas processing. MDS does not own or operate a process or sweetening unit. Thus, the process and sweetening unit requirements of Subpart OOOOa do not apply to MDS natural gas production facilities.

MDS Energy Development, LLC Fugitive Emissions Components Affected Facilities - 40 CFR §60.5420a(b)(7) Reporting Requirements Biblical Life Well Pad - August 3, 2018 to August 2, 2019 Table A-1

Citation	Requirement	Information for Each Monitoring Survey Conducted During the Reporting Period	itoring Survey Conducted
40 CFR §60.5420a(b)(7)(i) D	Date of the survey.	12/14/2018	6/14/2019
40 CFR §60.5420a(b)(7)(ii) B	Beginning and end time of the survey.	9:42 am to 10:05 am	9:44 am to 10:11 am
(i)	Name of operator(s) performing survey. If the survey is performed by optical gas imaging, you must note the training and experience of the operator.	Michael Haberman, WEB-IR50-FLIR GF Camera Operations Basics Training (Infrared Training Center), lab and site training by Clean Air Systems (Pittsburgh, PA). Mr. Haberman has 8-years experience conducting FLIR camera surveys.	JR GF Camera Operations Basics , lab and site training by Clean Air laberman has 8-years experience camera surveys.
40 CFR §60.5420a(b)(7)(iv)	Ambient temperature, sky conditions, and maximum wind speed at the time of the survey.	39°F, partly sunny with no precipitation, wind speed less than 5 mph	56°F, sunny with no precipitation, wind speed greater than 10 mph
40 CFR §60.5420a(b)(7)(v)	Monitoring instrument used.	FLIR GF3	FLIR GF320 Camera
40 CFR §60.5420a(b)(7)(vi)	Any deviations from the monitoring plan or a statement that there were no deviations from the monitoring plan.	There were no deviations from	There were no deviations from the Emissions Monitoring Plan.
40 CFR §60.5420a(b)(7)(vii)	Number and type of components for which fugitive emissions were detected.	No leaking components were found during the survey.	No leaking components were found during the survey.
40 CFR §60.5420a(b)(7)(viii)	Number and type of fugitive emissions components that were not repaired as required in 40 CFR §60.5397a(h).	N/A	N/A
40 CFR §60.5420a(b)(7)(ix)	Number and type of difficult-to-monitor and unsafe-to-monitor fugitive emission components monitored.	There were no difficult-to-monitor of component	There were no difficult-to-monitor or unsafe-to-monitor fugitive emissions components at the site.
40 CFR §60.5420a(b)(7)(x)	The date of successful repair of the fugitive emissions component.	N/A	N/A
40 CFR §60.5420a(b)(7)(xi)	Number and type of fugitive emission components placed on delay of repair and explanation for each delay of repair.	N/A	N/A
40 CFR §60.5420a(b)(7)(xii)	Type of instrument used to resurvey a repaired fugitive emissions component that could not be repaired during the initial fugitive emissions finding.	N/A	N/A